

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Customer No.: 34610

Sang Jin YUN et al.

Confirmation No.: 4745

Serial No.: 10/673,282

Group Art Unit: 2629

Filed: 9/30/2003

Examiner: Alexander S. BECK

For: METHOD AND APPARATUS FOR DRIVING PLASMA DISPLAY PANEL

SUPPLEMENTAL RESPONSE AND
SUBSTANCE OF THE INTERVIEW

U.S. Patent and Trademark Office
Customer Service Window, **Mail Stop Amendment**
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Sir:

In further response to the Office Action dated January 18, 2008, applicants are requesting further reconsideration of the outstanding rejection.

Claims 1, 2, 4, 6-10, 12-16, 18 and 20-24 are pending in this application. Applicants maintain all the arguments set forth in the Amendment filed March 7, 2008. Applicants gratefully acknowledge the courtesies extended by Examiner Beck and Supervisory Examiner Lefkowitz during the personal interview on April 23 with applicants' representative, Mr. Oren. The substance of the interview is incorporated into the following remarks.

Independent claim 1 recites setting a number of sustaining pulses in response to an average picture level, and setting a period of each sustaining pulse in proportion to said average picture level, the period of each sustaining pulse including a high width and a low width, the

sustaining pulse having a wider period as the average picture level becomes higher. Independent claim 1 also recites that the wider period of the sustaining pulse being obtained by increasing a duration of the high width of the sustaining pulse in proportion to the average picture level and maintaining a duration of the low width of the sustaining pulse.

As discussed during the personal interview, Nunomura's FIG. 4 and col. 7, lines 14-35 relates to setting a sustaining pulse period to 4.0 μm , 5.0 μm and/or 6.4 μm . This does not teach or suggest setting a period of each sustaining pulse in proportion to the average picture level as recited in independent claim 1. Furthermore, Nunomura does not teach or suggest setting a period of each sustaining pulse in proportion to the average picture level, the sustaining pulse having a wider period as the average picture level becomes higher, the wider period of the sustaining pulse being obtained by increasing a duration of the high width of the sustaining pulse in proportion to the average picture level and maintaining a duration of the low width of the sustaining pulse.

As discussed during the personal interview, Nunomura, at best, relates to changing a high width and a low width of a sustain pulse at a same time with a same pattern. There is no suggestion to modify Nunomura's driving technique so as to obtain the claimed features.

Nunomura's FIG. 2 also shows a driving sequence in which the period of sustaining pulses is long in A and B and short in C and D. However, this does not suggest the features of increasing a duration of a high width of the sustaining pulse in proportion to the average picture level and maintaining a duration of the low width of the sustaining pulse.

The January 28 Office Action cites Homma's FIG. 9 as showing a sustaining electrode that includes sustaining pulses having an increased "high" width a of a sustaining pulse and a "low" width b of the sustaining electrode. The Office Action also cites col. 7, line 12-col. 8, line 25. As discussed during the personal interview, the cited section of Homma does not relate to increasing a duration of a high width of the sustaining pulse in proportion to the average picture level and maintaining the duration of the low width of the sustaining pulse. Homma does not discuss an average picture level and/or increasing a duration of a high width in proportion to an average picture level. Rather, Homma increases the width a of the sustaining pulse to increase the area of emission of light on the sustaining electrode. See col. 7, lines 45-52 and col. 8, lines 7-11. Homma does not teach or suggest increasing a duration of the high width of the sustaining pulse in proportion to the average picture level and maintaining a duration of a low width of the sustaining pulse. As such, Homma does not teach or suggest features of independent claim 1 missing from Nunomura.

Additionally, as discussed during the personal interview, there is no suggestion to modify Nunomura based on Homma. At best, Homma describes increasing a high width a of a sustaining pulse. Therefore, if Nunomura is modified based on Homma, then the express teachings of Nunomura would be altered and/or destroyed. By increasing a width a of a sustaining pulse as allegedly discussed in Homma, then Nunomura's sustain period will change. Nunomura and Homma, either alone or in combination, do not teach or suggest setting a number of sustaining pulses in response to an average picture level in combination with setting a

period of each sustaining pulse in proportion to the average picture level. As discussed in the personal interview, there is no teaching or suggestion in Nunomura, either alone or in combination with Homma, of a wider period of the sustaining pulse being obtained by increasing a duration of the high width of the sustaining pulse in proportion to the average picture level and maintaining a duration of the low width of the sustaining pulse, as recited in independent claim 1. Thus, independent claim 1 defines patentable subject matter.

Each of the other independent claims 12 and 16 defines patentable subject matter for at least similar reasons and/or the reasons set forth in the response filed March 7, 2008.

Independent claim 4 relates to the wider period being obtained by increasing a duration of the low width of the sustaining pulse in proportion to the average picture level and maintaining a high width of the sustaining pulse. See also independent claims 14 and 18. Nunomura and Homma do not teach or suggest at least these features. Homma also does not teach or suggest increasing a duration of the low width of the sustaining pulse in proportion to the average picture level and maintaining a duration of the high width. Thus, each of independent claims 4, 14 and 18 defines patentable subject matter.

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance of claims 1, 2, 4, 6-10, 12-16, 18 and 20-24 are earnestly solicited. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

Serial No. 10/673,282

Docket No. YHK-0120

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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